FUNCTIONAL USES OF PLANT MATERIAL

by Gary Robinette

PLANTS ARE BEAUTIFUL but they have functional purposes as well. A tree may have an attractive branching pattern, but it is a sculptural luxury if it serves no other purpose. To know fully all of the functions a plant can serve would certainly make the choice of the correct plant less subject to personal perferences and more dependent upon what the plant is able to accomplish.

It is logical that the only basis for all planting design should be the utilization of most, if not all of the functional uses of plant materials. It is "selling plants short" to use them only for "beautification." Plants can do far more, and should be used so as to take advantage of all their potential. The primary aim of all planting design should be to use plants to solve functional problems, making the landscape more habitable and pleasurable. Basic to this accomplishment is a knowledge of (a) what functional problems plants can solve; (b) how effectively they can solve them and (c) what are the sizes and types necessary for that solution.

The following is a cataloging of the major purposes for which plants are now being and have been used to make a more habitable and pleasurable environment.

ARCHITECTURAL USES

Used either singly or in groups plants can form walls, canopies or floors of varying height and density, a characteristic giving them architectural potential. In designing buildings the architect uses his material (such as wood, masonry, steel and concrete) to give privacy, to screen, to progressively reveal a view, or to articulate space. Is an area too vast for comfortable human use? Should privacy be given to the users of an area? Is there an unsightly area to be screened? Should a significant view be progressively revealed so as to make it more interesting? When the planting designer uses plants for any of these purposes, it can be said that these plants are used architecturally.

ENGINEERING USES

In the external environment it is the engineer who is primarily concerned with glare, traffic and sound control, air conditioning, or filtration and soil erosion. Our world daily becomes more dazzling and glittery with the introduction of glass and metal automobiles, building materials, signs and other such objects.

Plants, when well chosen and judiciously placed, can control both natural and man-made glare and reflection. Automotive, annual and pedestrain traffic may be pleasantly directed and guided by the same careful plant choice and location.

Although little study has been done in determining the effectuality of plant material in either softening or muffling sounds in our ever more noisy environment, preliminary examination seems to point to the fact that